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09/717,241	11/22/2000	Yatish Pathak	2664.4	2770

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EXAMINER

WAHBA, ANDREW W

ART UNIT	PAPER NUMBER
2661	5

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/717,241

Applicant(s)

PATHAK ET AL.

Examiner

Andrew W Wahba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-16, 18-26 and 31-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-46 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2,3</u>   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-36 and 46, drawn to plurality of contiguous regions served by fixed stations, classified in class 370, subclass 328.
- II. Claim 37-45, drawn to channel assignment, classified in class 370, subclass 329.

The inventions are distinct, each from the other because: Claims 1-36 and 46 form Group I. With respect to independent claim 1, the applicant claims a network utilization manager, at least one base station and a plurality of subscriber stations including two subscriber communication ports. With respect to independent claim 24, the applicant claims a subscriber station with a processor to manage two communication ports. Claims 37-45 form Group II. With respect to independent claim 37, the applicant claims a method of managing communication between a base station and subscriber stations.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

2. During a telephone conversation with Richard Bauer on 04/01/04 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-36, 46. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 37-45 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the network utilization manager must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because Figures 2, 3, and 4 require descriptive labels. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. Claim 28 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim does not refer back in the alternative only. See MPEP § 608.01(n). Accordingly, the claim 28 has not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 10, 18-19, 21 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 recites the limitation "said switch and router" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "said switch and router" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "said router" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 32 recites the limitation "said prioritization" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claim 1-4, 8-9, 11-16, 20, 22-26, 31, 33-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Gorsuch et al. With regard to claim 1, Gorsuch et al discloses a bandwidth manager 174 (network utilization manager) at the base station (column 4, line 43) and a bandwidth manager 134 (network utilization manager) at the subscriber

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(column 4, line 20). Gorsuch et al discloses base station 170 (base station) (column 4, line 42-44). Gorsuch et al discloses subscriber units 101 and 102 (subscriber stations) with terminal equipment 110 and 112 (subscriber communication port) (column 4, lines 22-23 and 61-64).

With regard to claim 2, Gorsuch et al discloses a bandwidth manager 174 (network utilization manager) at the base station (column 4, line 43) and a bandwidth manager 134 (network utilization manager) at the subscriber (column 4, line 20).

With regard to claim 3, Gorsuch et al further discloses that the bandwidth manager 134 allocates CDMA channels as required (required/desired data rate) and includes dynamic management of bandwidth allocated to a given session (column 4, lines 29).

With regard to claim 4, Gorsuch et al discloses voice and data communication to terminal equipment 110 and 112 (column 4, lines 13-14). Accordingly, minimum bandwidth (QoS) and data rate (QoS) are inherent.

With regard to claim 8, Gorsuch et al further discloses that base station 170 is connected to the PSTN 180 (PSTN gateway) (column 4, lines 47-48).

With regard to claim 9, Gorsuch et al further discloses that base station 170 is connected to the PSTN 180 using primary rate ISDN, IS –634 or V5.2. (backhaul connection) (column 4, lines 50-53).

With regard to claim 11, Gorsuch et al further discloses a ISDN modem 120 that relays voice and data (data communication port) to terminal equipment 110 and 112 (column 4, lines 13-14).

With regard to claim 12, Gorsuch et al further discloses that the subscriber unit may provide higher speed data services (Ethernet communication port) (column 4, lines 59-60).

With regard to claim 13, Gorsuch et al further discloses a ISDN modem 120 that relays voice (radio) and data to terminal equipment 110 and 112 (column 4, lines 13-14).

With regard to claim 14, Gorsuch et al further discloses a ISDN modem 120 that relays voice (telephony) and data to terminal equipment 110 and 112 (column 4, lines 13-14). Figure 1 illustrates two telephony ports.

With regard to claim 15, Gorsuch et al further discloses a ISDN modem 120 that relays voice (telephony) and data to terminal equipment 110 and 112 (column 4, lines 13-14). It is well known in the art that a telephone port may be employed to transmit data.

With regard to claims 16, Gorsuch et al further discloses a bandwidth request module 740 that may include electing the request with the highest priority in which a list of available channels is analyzed and assigned (assigning capacity) based on need, availability and priority (column 10, lines 16-22). In electing the request with the highest priority, a table identifying requests and their respective priorities is inherent.

With regard to claim 20, Gorsuch et al further discloses a plurality of base stations 170 (two base stations) (column 3, line 37-38) each of which has a bandwidth manager 174 (network utilization manager) (column 4, line 43).

With regard to claim 22, further discloses a ISDN modem 120 that relays voice (telephony) and data to terminal equipment 110 and 112 (column 4, lines 13-14). As the modem has a plurality of ports the router is inherent.

With regard to claim 23, further discloses a ISDN modem 120 that relays voice (telephony) and data to terminal equipment 110 and 112 (column 4, lines 13-14). As the modem has a plurality of ports the switch is inherent.

With regard to claim 46, Gorsuch et al discloses voice (voice) and data (data) communication to terminal equipment 110 and 112 (column 4, lines 13-14).

With regard to claim 24, Gorsuch et al discloses a transceiver 140 (radio) (column 4, line 1) located between antenna 150 (antenna) (column 4, line 2) and ISDN modem 120 (modem) (column 4, lines 9-15) as illustrated in Figure 1. Gorsuch et al further discloses and a bandwidth manager 134 (processor) at the subscriber (column 4, line 20).

With regard to claim 25, Gorsuch et al further discloses a ISDN modem 120 that relays voice and data to terminal equipment 110 and 112 (column 4, lines 13-14). Terminal equipment 110 may be a computer or PDA (column 3, lines 41-42). Terminal equipment 112 is a telephone (column 3, line 56).

With regard to claim 26, Gorsuch et al further discloses that the bandwidth manager 134 allocates CDMA channels as required (requirements) and includes dynamic management (evaluates) of bandwidth allocated to a given session (column 4, lines 29).



With regard to claims 31, Gorsuch et al further discloses that the bandwidth manager 134 allocates CDMA channels as required and includes dynamic (prioritizes) management of bandwidth allocated to a given session (column 4, lines 29).

With regard to claim 33, 34, and 35, Gorsuch et al discloses voice (type/voice) and data (type/data) communication to terminal equipment 110 and 112 (column 4, lines 13-14). Accordingly, minimum bandwidth (QoS) and data rate (QoS) are inherent.

***Allowable Subject Matter***

10. Claims 5-7, 17, 27, 29-30, and 36 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W Wahba whose telephone number is (703) 305-4684. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Wahba

April 2, 2004



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